

CLAIMS

[1] An electronic component including, on one surface of a substrate, a plurality of circuit elements and external terminals for the circuit elements, each of the external terminals consisting of a conductive protrusion, wherein

each of the circuit elements includes, as constituent elements, a pair of electrodes and a resistive element or a dielectric contacting with the pair of electrodes, said each circuit element is covered with an overcoat while the electrodes are partially exposed as lands, said conductive protrusion includes a fixedly bonding member, said conductive protrusion is fixedly bonded to each of said lands by the fixedly bonding member, at least three of said lands are larger in area than the other lands, the electronic component can stand alone while the conductive protrusion contacts with a flat if the conductive protrusion is fixedly bonded only to each of the larger-area lands, and the conductive protrusions are all formed by fixedly bonding conductive balls substantially equal in size to entire surfaces of the respective lands.

[2] The electronic component according to claim 1, wherein each of the larger-area lands is located at a position proximate to an external end of the substrate.

[3] The electronic component according to claim 1 or 2, wherein the conductive balls are fixedly bonded to the entire surfaces of the respective lands by the fixedly bonding member having an amount proportional to an area of each of the lands.

[4] The electronic component according to any one of claims

1 to 3, wherein

a maximum cross-sectional area of the conductive protrusion fixedly bonded to each of said larger-area lands along a substrate surface is larger than a maximum cross-sectional area of the conductive protrusion fixedly bonded to each of the other lands along the substrate surface.

[5] The electronic component according to any one of claims 1 to 4, wherein

a region in which each of the electrodes extending from each larger-area land is connected to the restive element or the dielectric while superimposing each other is present while avoiding a line that connects a shortest path between a center of each larger-area land, and the electrode that is arranged on the other end and that pairs with said electrode.

[6] The electronic component according to any one of claims 1 to 5, wherein

a size of the substrate in a direction of a longer side of the substrate is larger than a size of the substrate in a direction of a shorter side of the substrate on each larger-area land.

[7] The electronic component according to any one of claims 1 to 6, wherein

each larger-area land is present in each of four corners of a tetragonal substrate.

[8] The electronic component according to any one of claims 1 to 7, wherein

each larger-area land is present at a position proximate

to each of both external ends of the tetragonal substrate in the direction of the shorter side of the substrate.

[9] The electronic component according to any one of claims 1 to 8, wherein

each larger-area land is one of a tetragon, an ellipse, and a tetragon having four round corners.

[10] The electronic component according to any one of claims 1 to 9, wherein

a size of each larger-area land in the direction of the longer side of the substrate is larger than a size of each larger-area land in the direction of the shorter side of the substrate.

[11] The electronic component according to any one of claims 1 to 12, wherein

the conductive protrusion substantially does not contain lead.

[12] The electronic component according to claim 11, wherein the conductive protrusion mainly consists of copper.

[13] The electronic component according to any one of claims 1 to 12, wherein

the resistive elements or the dielectrics that constitute the electronic component are substantially equal in shape, and distances between the adjacent resistive elements or the adjacent dielectrics are substantially equal.

[14] The electronic component according to any one of claims 1 to 13, wherein

each larger-area land consists of Metal Graze[®] material,

and an entire surface of each larger-area land is covered with the fixedly bonding member.